

Amendments to the Specification:

Please replace paragraph [007] with the following amended paragraph:

[007] Referring to the prior art illustrated in FIGS. 1 and 2, wherein like reference numerals denote like elements, there is shown a row of vertical lengths of essentially parallel boiler tubes 10 which are kept in alignment and spaced from each other by a rigid structure known in the industry as a split ring casting which is comprised of two halves 14 that are ~~scalloped or~~ shaped with arcuate or semicircular grooves to fit around portions of the boiler tubes 10. The two halves are drawn together and clamped or fastened around the boiler tubes 10 by a cross-bar 18 to maintain the pendant tubes 10 in parallel alignment and spaced with respect to each other. A retainer shield 20 conforming to the external dimensions of the front end of the split ring casting is welded thereto as indicated at weld area 22, shown in FIG. 1. The boiler tubes 10 are fitted with semi-cylindrical shaped tube shields 24 for protection against the abrasive impingement of the high velocity fluid cleaning medium being ejected from sootblower nozzles, not shown. The tube shields are spaced from each other and cooperate with the outer surface of boiler tube 10 to form a recess 28 therebetween, as shown in FIG. 2. A serious problem has been encountered with this prior art arrangement due to the difference in thermal expansion of the tube shields 24 relative to the boiler tubes 10 at high boiler operating temperatures, that has resulted in the gaps 26 being formed between the tube shields 24 and the split ring casting 12 thereby exposing a portion of the outer surface of boiler tubes 10 to the abrasive impact of the high velocity sootblower fluid cleaning medium.

AMENDMENT**Attorney Docket No. Case 7073****Patent Application Serial No. 10/802,474****Reply to Office Action dated May 12, 2005****Art Unit 3749****Confirmation No. 5322****Page 4**

Please replace paragraph [008] with the following amended paragraph:

[008] The aforementioned problem occurs in the unprotected tube area existing between the adjacent end faces of the tube shield 24 and the split ring casting 12. Efforts at structurally bringing these end faces together and eliminating any gaps 26 therebetween have met with failure as a result of the difference in thermal expansion of the tube shield 24 relative to the protected tube 10 at high boiler operating temperatures. Experience has shown that the gap 26 existing between the adjacent end faces of the tube shield 24 and the split ring casting 12 is one of the most vulnerable areas to sootblower tube erosion due to flow disturbances created around the split ring casting 12.

Please replace paragraph [0011] with the following amended paragraph:

[0011] The present invention provides a rigid structure in the form of a split ring casting comprised of two halves, with each having an inner face shaped with semicircular grooves such that when the two halves are mated, parallel and spaced apertures are formed to hold a row or series of boiler tubes in an aligned and fixed spaced relationship. A retainer shield covers the front of the split ring casting. The boiler tubes are fitted with sootblower erosion protective shields located above and below the split ring casting. In accordance with the present invention, the two halves of the split ring casting and the retainer shield are sized to overlap adjacent portions of the upper and lower protective tube shields thereby covering any gaps that may occur between the protective tube shields and the split ring casting resulting from the difference in ~~their respective rates of~~ thermal expansion of the tube shields relative to the boiler tubes at high boiler operating temperatures.

Please add the following new paragraphs after paragraph [0017]:

[0017.1] FIG. 6 is an enlarged detail of a portion of the sectional side view of the split ring casting shown in FIG. 4; and

[0017.2] FIG. 7 is an enlarged detail of a portion of the sectional view of the split casting shown in FIG. 5.

Please replace paragraph [0019] with the following amended paragraph:

[0019] Referring now to FIGS. 3, 4 and 5 which embody the present invention, there is shown a row of vertical lengths of essentially parallel boiler tubes 30 fitted with upper and lower protective shields 32 which are spaced from each other and cooperate with the outer surface of the boiler tubes 30 to form the recess 34, as shown in FIG. 5. The boiler tubes 30 are kept in alignment and spaced apart by a split ring casting 36 comprised of two halves 38 whose inner faces or surfaces are ~~scalloped or~~ shaped with arcuate or semicircular grooves to fit around portions of the boiler tubes 30 and the adjacent sections of the protective shields 32 thereby also covering the gaps 40 resulting from the difference in thermal expansion of the tube shields 32 relative to the boiler tubes 30 at high boiler operating temperatures. A retainer shield 42, conforming to the external dimensions of the front end of the split ring casting 36, fits around this front end the adjacent sections of the protective tube shields 32, and thus also covers the gap 40, as shown in FIGS. 4 and 5. The retainer shield 42 is welded to each of the two halves 38, as indicated at weld area 44, shown in FIGS. 3 and 4, and to the adjacent protective tube shields 32 as indicated at weld area 56. The two halves are drawn together and fastened

or clamped around the boiler tubes 30 and the adjacent sections of the protective tubes shields 32 by a cross-bar 46 to maintain the boiler tubes in parallel alignment and spaced from each other. The cross-bar ~~bar~~ 46 is welded to the two halves 38 as indicated at weld area 48. Each of the two halves 38 ~~and the retainer shield 42 have~~ has a T-shaped cross section with a central portion or tongue member 50 which faces the tubes 30 and fits into the recess 34 defined by the opposing sides of the upper and lower tube shields 32 and the outer surface of the tubes 30, and with the longitudinal end portions or lip members 52 and 54 that overlap the adjacent sections of the tube shields 32 to cover any gaps existing therebetween. The lip members 52 and 54 are preferably welded to the adjacent protective shields 32 as indicated at weld area ~~[[56]]~~ 58 and as shown in FIG. 4. Thus, in accordance with the present invention, the gaps 40 lying within the recesses 34, and which would otherwise expose a portion of the outer surface of the boiler tubes 30 to abrasive impingement by the high velocity sootblower fluid cleaning medium, are covered and shielded from this abrasive cleaning medium by the overlapping lip members 52 and 54 of the two halves 38 and the retainer shield 42.

Please add the following new paragraph after paragraph [0019]:

[0019.1] Turning now to FIGS. 6 and 7, there are shown enlarged details of portions of the views shown in FIGS. 4 and 5, respectively. A portion of the tube 30 is fitted with the protective shield 32, and the latter is welded to the retainer shield 42 as indicated at weld area 56. The split ring casting half 38 includes the central portion or tongue member 50 extending into the recess 34 and the lip member 52 which covers the gap 40 existing between the protective tube shield 32 and the tongue member 50.